DOCUMENT RESUME

ED 286 588 PS 016 692

AUTHOR Chan, Marilyn M.
TITLE Maternal Attachment Behaviors with Adopted and Birth Infants.
PUB DATE Apr 87
NOTE 15p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Baltimore, MD, April 23-26, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adopted Children; *Attachment Behavior; *Biological Parents; Comparative Analysis; Family Problems; *Infants; *Intervention; *Mothers; Parent Attitudes; Pretests Posttests
IDENTIFIERS *Tactile Communication

ABSTRACT

This study investigated: (1) effects of teaching mothers the unique behavioral cues of their adopted infants and (2) potential differences between the mothering practices of adoptive and birth mothers. A pretest, posttest experimental prospective design was used with random assignment of mother-infant dyads. Mother-adopted infant dyads were further randomly divided into intervention or nonintervention groups, creating control groups of adoptive and birth mothers. Participating mothers were approximately 30 years old; infants were between 2 and 3 months old. A newborn physical, a maternal interview, and dyadic observation after a stressful period were performed as pretest and posttest. Pretests indicated that all adopted infants differed from birth infants in affect, holding, and gazing. Adoptive mothers looked at their infants less than control birth mothers. The intervention group was taught specific behavioral cues from Barnard's Infant Behavior Assessment Record. After intervention, adoptive mothers in the intervention group demonstrated more maternal vocalizing and touching than did adoptive controls. Adopted infants held onto mothers more and withdrew from maternal touch more than did adopted infant controls. Findings indicated that birth and adoptive mothers differed in concerns and feelings. It is concluded that mothering practices of mothers of adopted infants can be changed by a specific teaching intervention. Recommendations for future research are discussed. (Author/RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED286588

MATERNAL ATTACHMENT BEHAVIORS WITH ADOPTED AND BIRTH INFANTS

by

MARILYN M. CHAN, M.S., M.Ed.

UNIVERSITY OF UTAH
SALT LAKE CITY, UTAH 84112

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Marilyn M. Chan
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

DRAFT: DO NOT QUOTE WITHOUT PERMISSION

PS 016692

PRESENTED AT: 1) Western Society for Pediatric Research
February 6, 1986, Carmel, California

2) Western Society for Research in Nursing
May 1, 1986, Portland, Oregon

3) 2nd Nursing Research Utilization Conference
March 26, 1987, Tucson, Arizona

4) Society for Research in Child Development
April 25, 1987, Baltimore, Maryland

BEST COPY AVAILABLE

ABSTRACT

The purpose of this study was a) to investigate the effects of teaching mothers unique behavioral cues of their adopted infant and b) to learn if there is a difference between mothering of adopted and birth infants.

A pretest, posttest experimental prospective design was used with random assignment of mother-adopted infant dyads. Maternal adopted infant dyads were randomized into intervention or nonintervention groups. Infants were tested using Massie's "Mother Infant Attachment Indicators During Stress." After a stressful period, pretests and posttests were performed. During the interim, a teaching session of specific behavioral cues was shown to only the intervention group. Posttest scoring was evaluated by a blind observer; inter-rater reliability agreement was 0.90.

Mean age of the 17 adoptive mothers was 33±4 years; of the adopted infants, it was 11±9 weeks. Age matched birth mothers formed the control group. The mean age of the 13 birth mothers was 31±5 years; of the birth infants it was 8±9 weeks.

Before intervention, all adopted infants differed in affect ($p < .07$), holding ($p < .03$) and gazing ($p < .05$) from birth infants. Adoptive mothers looked at their infants less than control birth mothers ($p < .002$).

To study the mothering of adoptive mothers, we evaluated the effect of a teaching intervention on adoptive pairs. Before intervention, all

adopted infants had similar holding-touching responses. After intervention, the adopted infants held onto ($p < .08$) and touched ($p < .05$) their mothers more. Also, the adopted experimental mothers touched their infants more ($p < .08$) and vocalized more ($p < .03$) than did the noninterventional control adoptive mothers.

A qualitative analysis of an interview schedule was administered to all study subjects. Four themes developed: a) fantasy about their infant; b) maternal role acquisition; c) anticipatory planning; and d) infant's characteristics. Themes that emerged that were of concern to adoptive mothers were: the shared experience of adoption (due to birth parents), ambiguity or protective coping feelings of possible relinquishment and antagonistic feelings regarding the adoption process. Therefore, the study found differences in concerns and feelings between birth and adoptive mothers.

In conclusion, we have found a difference in the maternal-adopted infant dyad when compared to birth mother-infant dyads. It appears that mothering of adopted infants may be changed temporarily by a specific teaching intervention.

SUMMARY

Specific Aims and Objectives

The maternal-infant dyad and the intricacies of that budding relationship are of interest not only to families but to researchers working in the health care system. For if there are aspects of maternal-infant behaviors that can be taught, learned, and improved upon, then many avenues for clinical health care delivery are affected.

This study examined the developing relationship of mothers for their adopted newborns. The concerns are not only for the unique and complex elements the infant brings, but the mother's interactional complexities in response to her infant. The information obtained increases our knowledge to subsequently enhance budding maternal-infant relationships.

Rationale and Background

A maternal-adopted infant dyad attachment study had never been reported nor investigated with this population age grouping. Outcome success with adopted children has been retrospective. Because the

literature reported studies of birth mothers and their newborn infants only, the entire question of learning parenting-sensitivity cues during a crucial time and beginning at a different time frame than traditional "birth" had not been explored.

Review of the Literature

The review of the literature begins in the 1930s with Konrad Lorenz's work with emotional bonding of goslings, called imprinting behaviors. Later, work by the Harlows (1959) with rhesus monkeys identified the importance of soft, warm, nurturing mother-monkeys as well as the importance of peer relationships to the building of healthy, caring adult monkeys capable of being nurturing. Maternal deprivation studies by Mary Ainsworth (1978) viewed children in early years with genuine difficulties in groups because the initial, strong emotional bonding with mother was lacking. And, more recently, the work of Klaus and Kennell (1976) to humanize obstetrical care to allow extended, early contact for mothers and fathers just after giving birth has been published. Other researchers remarked on the adaptability and resiliency of infants. And, these researchers disputed the notion of separation or multiple care-givers having a detrimental effect on a child.

More recently, Michael Lamb posed the concern: If a mother-infant dyad does not have early, extended contact immediately postpartum, "then a legion of parents feel they have missed something terribly important and thus can never be as competent or nurturant as those parents who were able to bond" (Lamb, 1982, p. 556).

There is much controversy whether adopted children are any different than children in the general population. This reflects on early parenting and subsequent adjustment outcome. Most of these accounts, however, were retrospective studies after age 6 or after adolescence. Other studies in the adoption literature report on adoption from the parental or family perspective, whereas adoption outcome was rated positively based on role satisfaction.

In most all the maternal-attachment literature, the populations used are primiparous or multiparous birth mothers. The studies do not look at early mother-infant attachment between mothers and their adopted infants.

This research study was based within the conceptual framework of John Bowlby. His theory of attachment views the complexity of behaviors that unites a child to a mother figure. If infant-mother interactions can be enhanced, as Bowlby postulates, then appropriate reassurance and teaching interventions can and must be based on a child's uniqueness.

Positive strengths can be learned of the infant's traits and temperament. The maternal involvement and ultimate understanding of her infant's communications and the mutually reciprocal role each plays in their ongoing tapestry of attachment is profoundly important as the dyad becomes acquainted over time.

Because maternal-infant acquaintance is the beginning relationship forming in a newly created family, an acquaintance study seemed most appropriate. Because of the very nature of adoption, the placement of the infant in days or weeks after birth, the question of how and when this initial acquaintance and ultimate attachment takes place was examined.

The goal of this study was to better understand the normal maternal-infant dyad acquaintance behaviors, and thereby be able to detect gradations or absence of these acquaintance behaviors.

The purpose of this study was:

a) to learn if there is a difference between mothering of adopted and birth infants;

b) to study the effects of teaching mothers unique behavioral cues of their adopted infant.

Research Methodology

Design - A pretest, posttest experimental prospective design was used with random assignment of mothers and their adopted infants. The experimental design required the use of a longitudinal study initiated during the early weeks after placement of the new infant in the adoptive home. The control group was age-matched (for mother's and infant's age) birth mothers. All infants were tested with the attachment scale (see measurements). All adopted infants were tested twice with this scale. The posttest data collector was blind to group assignment of intervention or nonintervention status.

Subjects - Healthy term infants less than 6 months of age were studied. Adoptive infants were referred from private pediatricians and adoption agencies. The control group was composed of birth mothers with their first infant.

Procedures - Maternal-adopted infant pairs were randomly placed in either teaching intervention group (experimental) or a nonintervention (nonexperimental) group. A newborn physical, maternal interview, and an observation period of the mother-infant dyad after a stressful period

were performed as a pretest and posttest. During the interim a teaching session of specific behavioral cues from Barnard's Infant Behavior Assessment Record was held for only the intervention group. Posttest scoring was evaluated on all adopted infants by a research assistant unaware of group membership. Interrater reliability agreement was 0.90.

The group of birth mothers and their infants acted as age-matched controls. This group had a newborn physical, maternal interview and an observation period of the maternal-infant dyad after a stressful period.

Measurements - The two instruments used for this study were the Barnard's "Infant Behavior Assessment Record" and the Massie-Campbell Scale of Mother-Infant Attachment Indicators During Stress.

Data Analysis - Data analyses between groups consisted of student t tests. All three groups were evaluated by analyses of variance.

Research Findings

The purpose of this study was a) to study the effects of teaching mothers unique behavioral cues of their adopted infants and b) to learn if there is a difference between mothering of adopted and birth infants. A pre- and posttest design was used with random assignment of mother-adopted infant dyads. Maternal-adopted infant dyads were randomized into intervention or nonintervention groups. Infants were tested using Massie's "Mother-Infant Attachment Indicators During Stress." After a stressful period, pre- and posttests were performed. During the interim a teaching session of specific behavioral cues were shown to only the intervention group. Posttest scoring was evaluated by a research assistant unaware of group membership.

The mean age of the 17 adoptive mothers was 33.6 ± 4 (±S.D.) years; of the adopted infants was 11 ± 9 weeks. The control group was composed of age-matched birth mothers. The mean age of the 13 birth mothers was 31.3 ± 5.1 years; of the birth infants, it was 8 ± 9 weeks.

Of the 14 descriptive scale items of Massie's Scale of Mother-Infant Attachment Indicators, five (5) trends and three (3) significant differences were found between the subjects.

In the subgroup of all adoptive versus birth mother-infant pairs the following results are summarized:

Control adopted infants differed between intervention (experimental) or control birth in:

a) infant gazing

b) infant holding

c) infant affect

Control adoptive mothers differed between intervention (experimental) or control birth in:

a) maternal gazing

The teaching intervention (the experimental) adoptive group offered the following trends and significant differences:

The experimental adoptive mothers demonstrated more maternal vocalizing and more maternal touching.

The experimental adoptive infants held onto their mothers more and withdrew from maternal touch more than control adoptive infants.

To summarize the results of the maternal interviews, various themes emerged. Adoptive mothers do little "prenatal bonding" or anticipatory planning for their infant. A common thread of sharing or babysitting

the new infant is felt by adoptive mothers. A lack of future orientation in regards to pragmatic infant care was demonstrated by adoptive mothers. Adoptive mothers rarely sought help with infant care, perhaps feeling that an expression of negativity about their infant is unacceptable. The tenuousness and feelings of ambiguity centered around the adoption process are evident in adoptive families. The uncertainty until finalization occurs is a real factor.

Mothers of adopted infants have similar fantasies regarding the physical characteristics of their infants. Also, adoptive and birth mothers both characterize their infants around similar themes of physical, cognitive and temperament abilities.

Conclusions

Adoptive mothers appear to have different attitudes than birth mothers because of the adoption process. These different attitudes appear to be regarding maternal role acquisition, "nesting" behaviors, advice given to a new mother and help-seeking behaviors of infant care.

The period of time before finalization of the adoption process appears in the early weeks of acquaintance between mother and adopted infant to affect and color that relationship. This is different than the early acquaintance of birth mother-infant pairs.

There is much concern about the rights of the birth mother, the rights of the adoptive family, the rights of adult adoptees for access to records. But the question was raised of the rights of the infant for a sensitive, mutual, reciprocal, contingent acquaintance and ultimately attachment within the legal adoption process. The rights of the infant need to be addressed. The anxious and ambiguous feelings of adoptive

mothers are hindering their total consuming acquaintance and attachment because of their fear of legal reprisals with possible relinquishment of their new infant. Not all the mothers were anxious, but this surfaced repeatedly as a dominant theme. Whether this ambivalence continues over time, shapes, colors or alters the relationship was not within the scope of this study. However, enough concern was raised to warrant a reassessment of our legal adoption finalization laws not for the birth or adoptive family but most importantly for the infant who needs that strong, unwaivering bond of attachment that birth infants possess.

The most vulnerable member of the dyad needs an advocate. Perhaps, maternal ambivalence because of possible relinquishment is an adequate indictment of the adoption process and a critical perspective needs to be made.

We have found some trends and differences in the maternal-adopted infant dyad when compared to birth mothers and their infants. The entire question of learning parenting-sensitivity cues during a crucial time and beginning at a different time frame than traditional "birth" needs to be explored. This work extends the knowledge accumulating in attachment research to encompass non-birth parents.

Humenick (1982) explored the positive effects that health care professionals provide families by simply noting desirable attributes of their infants. Anderson (1979), Barnard (1977), and Poley (1978) provided evidence that "pointing out infant's characteristics can positively influence mother-infant interactions." This study supports the hypothesis that teaching infant behavioral cuing provides positive adaptation.

Maternal-infant acquaintance behaviors of adopted infants can be changed by a specific teaching intervention. The intervention strategy

was successful. It needs to be tested further to learn if differences that were initially documented are changed over time or if time only alters the relationship. The reader needs to view the findings of this study with caution because of the small sample size. Replication of this study would be warranted with a larger sample size as well as over more data gathering time frames.

Implications and Significance for the Discipline of Nursing

We have found a difference in the maternal-adopted infant dyad when compared to birth mothers and infants. It also appears that mothering skills of adopted infants may be changed by a specific teaching intervention.

These research findings extend the knowledge accumulating in attachment research to encompass non-birth parents. These data establish parental teaching as effective to improving parenting skills by recognizing uniqueness and differences of behavioral cueing.

There are two nursing implications of this research: 1) this will improve patient care of not only the pediatric adopted infant but offer help in parenting skills and cues for adopted parents; 2) this will impact on nursing education to provide practical usage as nurses learn to expand their clinical and psychosocial practice with mother-adopted infant dyads.

Recommendation for Future Research

As new evidence is learned, it is important to add to the attachment literature. For as Bowlby postulated, infant behaviors are biologically inherited characteristics that can be reinforced and modified over time. Mothers then are the prime foci for research and studies to bring about further knowledge in the dyad. For, if there are aspects of maternal-infant behaviors that can be taught, learned and improved upon, then many avenues for clinical health care delivery are affected. The hope would be to be able to teach behavioral cuing to facilitate that acquaintance if difficulties are identified.

Further research needs to include not only birth mothers but special situations as well. Predominately primiparous birth mothers are utilized for research endeavors with multiparous birth mothers excluded because of the confounding variable of previous mothering experiences. Previous mothering, however, is a rich source of parenting strengths and styles that needs to be involved and analyzed in the research milieu to establish and document these mothering skills.

Special situation families include adoptive families and stepparent/child families. These special situation families are making an impact for their unique parenting needs. These groups are especially important as their commonality and incidences are increasing.

The need to study families within the context of the entire family constellation is paramount. This study was performed with many fathers present for all interviews. At examination sessions, little input was gathered from the fathers. Including the triad of mother-father-infant as well as other siblings adds much complexity to human interactions; it is the reality of the dynamic process that transpires in a given family.

Future research endeavors should be longitudinal studies to examine behavioral changes over extended periods of time. Developmental growth of 1,2 or even 5 years could be used for future studies. Then, other factors and indices could be utilized to measure attachment, i.e., school adjustment or school performance. Much of the psychologic literature defines attachment as existing if separation protest or separation response is evaluated. If future studies encompassed longer periods of time for data collection than further measurements, i.e., separation protest could be utilized.

Replication studies of effectiveness of teaching intervention need to be undertaken. Do the differences observed continue over a longer period of time or are they only transient? Would a teaching intervention of behavioral cuing and a knowledge base of the unique temperarental style of one's infant be most effective if performed serially in the first year or two of life?

Future research should involve continued refinement of sensitive acquaintance/attachment tools. These tools should have clinical relevance as the Massie tool provides. Research instrumentation requires good tests for reliability and validity. These tools could then provide for research use but also would be pragmatic for clinicians in practice.